

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application:

LISTING OF CLAIMS:

1. (currently amended): A laser apparatus comprising:
a semiconductor laser element which emits first laser light having a first wavelength;
a surface-emitting semiconductor element which ~~is excited with said first laser light,~~
~~emits second laser light having a second wavelength which is longer than said first wavelength,~~
~~and has an active layer and a first mirror arranged on one side of said active layer;~~ said surface-
emitting semiconductor being excited with said first laser light;

a second mirror which is arranged outside said surface-emitting semiconductor element
so that said first and second mirrors form a resonator ~~in which said second laser light resonates~~
oscillates second laser light having a second wavelength which is longer than said first
wavelength; and

a modulation unit which modulates a gain of said active layer ~~said surface-emitting~~
~~semiconductor element;~~

wherein said second mirror is physically separated from said surface-emitting
semiconductor element by an air gap.

2. (currently amended): A laser apparatus according to claim 1, wherein said surface-
emitting semiconductor element has a pn junction, and said modulation unit modulates said gain
of said active layer ~~the surface-emitting semiconductor element~~ by varying a voltage applied to
the pn junction.

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3. (currently amended): A laser apparatus according to claim 1, wherein said surface-emitting semiconductor element has a Schottky junction, and said modulation unit modulates said gain of said active layer ~~the surface-emitting semiconductor element~~ by varying a voltage applied to the Schottky junction.

4. (original): A laser apparatus according to claim 1, wherein said surface-emitting semiconductor element comprises a structure for controlling a spatial mode of said second laser light.

5. (currently amended): A laser apparatus according to claim 4, wherein said structure is realized by a pinhole spatial filter being arranged at a light-exit end surface of said surface-emitting semiconductor element, having a pinhole, and allowing passage of said second laser light ~~emitted by the surface-emitting semiconductor element~~, through only the pinhole.

6. (currently amended): A laser apparatus according to claim 4, wherein said structure is realized by said first mirror which has a limited area, and is arranged in parallel with a light-exit end surface of said surface-emitting semiconductor element, ~~and realizes said structure.~~

7. (currently amended): A laser apparatus according to claim 4, wherein said structure is realized by said active layer which is formed in only a limited area in a plane parallel to a light-exit end surface of said surface-emitting semiconductor element, ~~and realizes said structure.~~

8. (original): A laser apparatus according to claim 4, wherein said structure has a size which is 0.1 to 10 times as large as a diameter to which said second laser light spreads at a position of the structure for controlling the spatial mode of the second laser light.

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9. (previously presented): The laser apparatus according to claim 1, wherein said first laser light enters said resonator from a first surface of said first mirror which is opposite the active layer to excite the surface-emitting semiconductor element.

10. (canceled).

11. (previously presented): The laser apparatus according to claim 1, wherein said first laser light enters said surface-emitting semiconductor element through said air gap.

12. (canceled).

13. (canceled).